MODULE 7
OBJECTIVES

Upon completion of this module, the trainee will be able to:

1. Describe the four general techniques required to perform the different segments of the postmortem inspection procedures.

2. State the importance of developing good inspection techniques.

3. Give reasons for fulfilling the requirements of each technique.

Module 7
Script

These general postmortem inspection techniques usually apply to the inspection of all species. It is the establishment's responsibility to properly present all tissues and organs requiring inspection.

If any tissues or organs are missing, inspection shall be delayed until they are presented.

It is important that inspectors develop good inspection techniques that will enable them to perform inspection adequately and expediently, using approved procedures for the detection of possible abnormal or diseased conditions.

General Postmortem Inspection
Techniques Filmstrip
The following descriptions correspond to the general postmortem inspection techniques filmstrip:

Frame #1

I. Observation: Definition, the act of viewing or noting something.

   A. The carcass, its parts, individual organs, and tissues must be positioned in a manner that will allow thorough observation.

   B. Always look at the carcass and parts in their entirety.
      1. Check the general appearance, color, and character of the carcass as a whole.
      2. Learn to see what is looked at. The inspector:
         - Should avoid going through the motions with no inspection objective.
         - Must become familiar with the abnormal and separate these conditions from the normal.
   C. Make proper dispositions based on conditions found.

Frame # 2

1. If no normal conditions are found, the carcass and its related parts should be passed.

Frame #3

2. The inspector should know those abnormal conditions that can be removed under his/her supervision, with the unaffected part passed without veterinary disposition.

Frame #4

3. Know those abnormal conditions that require veterinary disposition.

Frames #5 and #6

4. Know those abnormal conditions associated with certain parts of the carcass or organs.

II. Incision: Definition-The act of cutting into.
When performing postmortem inspection, it is necessary to cut into tissue to expose internal structures or surfaces. It may involve one cut or a number of cuts to determine the presence, character, and extent of condition affecting the disposition of the carcass or its parts. [M-11-I(e)].

A. Equipment Needed.
   1. Knife
   2. Steel
   3. Hook
   4. Scabbard

B. Condition of Equipment.
   1. A properly sharpened knife cuts easily with minimum effort, thus exposing surfaces in a manner that presents a true picture of the part incised.

   2. A knife with a dull cutting edge may distort the appearance of the tissue by tearing or pulling. Hacking or chopping of nodes is unacceptable. [M-11.1(g)]

C. Lymph node incision.

Frames #7, #8, and #9

1. The inspector should make an exploratory incision through fatty tissue to expose the node. The hook should be placed as close to the node

Frame #10

2. Nodes are to be sliced thinly to provide more cut surfaces for observation. A wrist-roll motion will permit better observation of cut surfaces.

3. While incising the tissue of lymph nodes, careful attention should be given to the physical characteristics of the tissue to determine if any change from normal has occurred.

4. Other tissue required to be incised.

Frame #11

- Muscles of mastication (cattle and large calves) should be incised in a manner exposing only smooth muscle tissue. [M-11.1(h)(I)(i)3]

Frames #12, 13, 14, and 15

- Heart incision (cattle and large calves). The heart shall be incised in the manner prescribed part 11.1(h)(2)7 of the MPI manual.

Frame #16

- Opening of the bile duct (cattle and large calves). The bile duct shall be opened in the manner prescribed in part 11.1(h)(2)10 of the MPI manual. Avoid cutting into the liver tissue itself. This could result in a failure to detect the presence of small lancet liver flukes.

5. Inspectors are expected and required to make incisions and examinations that are essential for determining the presence, character, and extent of any abnormal condition. However, unnecessary mutilation must be avoided. [M-1 1.1(f)]

III. Palpation: Definition-to examine by the sense of touch.
Palpation is as important as observation and incision, and should be accomplished at the same time as other inspection techniques.

There are some abnormalities that exist within the tissue of carcasses and viscera that are more easily detected by palpation than by observation (i.e., deep-seated abscess in livers).

The following filmstrip frames demonstrate effective techniques of palpation in the inspection of carcasses and viscera parts.

Frame #17

This frame demonstrates the right and wrong technique to use when palpating beef livers. The most effective technique requires firm application of pressure with the fingers and the palm of the hand over the entire surface of the organ.

Frame #18

The same rule applies when palpating the lungs of any species.

Frame #19

Lymph node palpation. This technique is particularly important in rail inspection of cattle and sheep and viscera inspection of swine, calves, and sheep. Inspection of nodes requires firm pressure with the fingers and thumbs rolling the nodes between them. Nodes are often covered with heavy fatty tissue; this makes it necessary for the inspector to know the location of the node within the tissue.

IV. Olfactory. The use of the sense of smell is very important when performing postmortem examination.

Carcasses occasionally exhibit abnormal offensive odors. Two types of offensive odors will affect the disposition of carcasses: Those traceable to materials ingested by the animal, and the so-called sexual odor in swine. The most common odor traceable to feed is the fishy odor. The fishy odor presumably occurs in the carcasses of animals that have been fed fish

meal or other feed of fish origin.

Occasionally a garlicky odor is detected in a carcass. This generally occurs in the spring and is thought to be produced by a generous feeding of garlic.

Carcasses that have an offensive odor are not fit for human food unless special handling is required (i.e., passed for cooking). If an offensive odor is detected, the carcass should be retained until a proper test can be run (e.g., fat tissue heating) to determine disposition.

Other odors that are sometimes detected are medicinal, odors resulting from chemical residues, and urine odors. In any case, where foul odors are detected the carcass and its associated parts will be retained pending veterinary disposition.